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LEE, Y	EXAMINER
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ART. UNIT 2713	PAPER NUMBER
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UNITED STATES DEPARTMENT OF COMMERCE  
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 11

Application Number: 09/089,290

Filing Date: 6/1/98

Appellant(s): Liang et al

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Carlton Hoel  
For Appellant

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed 12/13/99.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1-5 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

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**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,635,985

BOYCE ET AL

6-1997

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Boyce et al.

This rejection is set forth in prior Office action, Paper No. 7, and explained below.

Boyce et al, in Figures 1-4, discloses a low cost joint HD/SD television decoder method that is the same method of decoding MPEG encoded video containing P frames (col. 6, lines 18-26) as specified in claims 1-5 of the present invention, comprising the steps of for at least one P frame decoding a first macroblock (col. 8, lines 26-45) at a first resolution 402 and decoding a second macroblock includes upsampling 131 of a stored reference macroblock 116 at a second resolution 401 greater than the first resolution 402; wherein the macroblocks have associated motion vectors 333; and wherein the first macroblock has high frequency component energy (2x2 DCT coefficients) less than a threshold (e.g. 4x4 DCT block) and the second macroblock has high frequency component energy (8x8 DCT coefficients) greater than the threshold (Fig. 4).

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**(11) Response to Argument**

In response to appellant's argument on pages 3 and 4 of the brief that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., switching within a frame to apply differing resolution decoding to different macroblocks) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Appellant also argues that claim 1 specifies two different macroblocks within a single frame are decoded in two different resolutions. However, a recitation that "each of at least one predicted frame" having two different possible resolution decoding within the frame is not found in Appellant's claim 1, as illustrated in Figure 30a of Appellant's Drawings. Without such specific limitation included in the claims, Examiner maintains that the invention of Boyce et al is consistent with Appellant's disclosure in its broadest sense where macroblocks may be either full and reduced resolution decoded and stored in memory.

One possible interpretation of Appellant's claim 1 requires a method of decoding video containing P frames, comprising two steps:

- (1) for one or more P frames, decode one macroblock at a first resolution; and
- (2) decode a different macroblock at a second resolution greater than the first resolution.

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Under this interpretation, Boyce et al discloses a decoder 400 for decoding one or more P frames of the MPEG video signal in at least two different resolutions (401,402). The macroblocks that are decoded in Primary Decoder 401 are at a resolution greater than the macroblocks that are decoded in Reduced Resolution Decoder 402.

Another possible interpretation of Appellant's claim 1 that is also consistent with Appellant's Specification specifies a method of decoding P frames of a video signal, comprising two processes:

- (1) decode at least one macroblock of the video at a first resolution; and
- (2) decode a second macroblock of the video at a second resolution greater than the first resolution.

Again, Figure 4 of Boyce et al also anticipates such alternative interpretation by disclosing two different decoders for performing two different processes. Reduced Resolution Decoder 402 decodes at least one macroblock of the MPEG video 399 at a reduced resolution; and Primary Decoder 401 decodes at least one other macroblock of the MPEG video 399 at a resolution greater than the reduced resolution 402.

In conclusion, Examiner respectfully submits that Appellant's argument regarding independent claim 1 that the two different macroblocks must be within a single frame of a single signal is not necessarily limited to Appellant's only interpretation.

In response to Appellant's argument on page 4 that Boyce et al includes additional structure to decode two different TV channel signals simultaneously for picture-in-picture


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which is not required by Applicant's invention, it must be noted that the appealed claims do not preclude such additional capabilities and that Boyce et al discloses the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant.

**(12) Conclusion**

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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January 20, 2000

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